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10/811,879	03/30/2004	Chang-Won Kim	P56991	2783

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EXAMINER	
ANDRAMUNO, FRANKLIN S	
ART UNIT	PAPER NUMBER
2623	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/811,879	KIM ET AL.	
	Examiner	Art Unit	
	FRANKLIN S. ANDRAMUNO	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03/30/04*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5,8-12,15,16 and 18-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,8-12,15,16 and 18-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *03/30/04* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *03/30/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

1DETAILED ACTION

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 25-27 are rejected under 35 U.S.C. 101 because they refer to a computer readable medium that is defined as a signal in the specification. It is not statutory to claim a signal since it does not fall into a statutory class.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-2, 4,8-12,15,16, 18-19, 21, and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gardes et al (US 2005/0055728 A1) in view of Phillips et al (US 7,239,698 B2) in view of Rakib et al (US 2004/0172658 A1). Hereinafter referred as Gardes, Phillips and Rakib.

Regarding claims 1-2, 8, 16 and 25-26 Gardes discloses an apparatus for separating a digital broadcasting signal from data transmitted using an Internet network **(Set Top Box receiver to access interactive digital TV coming from any IP network**

(page 1 paragraph (0013) lines 1-3), comprising: a transmission media for transmitting signals transmitted from a server providing a digital broadcasting service **(Broadcaster (page 1 paragraph (0013) line 6)** and an Internet provider server to a subscriber **(relying on existing internet architecture (page 1 paragraph (0013) line 5)**; a set-top box for separating data received through the transmission media into digital broadcasting data **(STB in figure 2)** and Internet data and outputting both data to corresponding units **(Internet Protocol (page 1 paragraph (0013) lines 2-3)**; a television set for receiving the digital broadcasting data outputted from said set-top box separately and processing the data **(TV services (page 1 paragraph (0013) lines 3-6)**; and a computer for receiving the Internet data outputted from said set-top box separately and processing the data **(IP in figure 2)**, with said set-top box comparing an Internet protocol address of a received Internet protocol packet with an broadcasting Internet protocol address assigned previously by a user **(Allowing use of said event information data to access IP streamed video content services (page 1 paragraph (0009) lines 3-6)**, and processing the Internet protocol packet in a Moving Picture Experts Group-N transport stream processing unit when the Internet protocol packet is determined as the broadcasting Internet protocol address **(MPEG2 streamed data (page 1 paragraph (0005) lines 3-4)**. **However, Gardes fails to teach** outputting the Internet protocol packet to said computer directly when the Internet protocol packet is determined not to be the broadcasting Internet protocol address assigned previously. Phillips discloses in **(column 26 lines 26-30)** NID (504) can be programmable and/or addressable, and in some embodiments, NID (504) can include an application

programming interface (630) to facilitate in the programming and/or addressing of NID (504). **However, Garder fails to disclose** the result value of the comparison of the comparator is determined to be an Internet protocol address corresponding to a digital broadcasting signal. Rakib discloses in **(page 18 paragraph (0190))** when an Ethernet packet addressed to network adapter (30) is received, it is examined to determine if the Ethernet address matches the address of the network adapter. Moreover, Rakib shows when the extracted Internet protocol header is identical with the broadcasting Internet protocol address **(page 8 paragraph (0061))**; outputting the Internet protocol packet to a computer **(IP Router (13) in figure 2)**, when the extracted Internet protocol header is not identical with a broadcasting Internet protocol address **(page 8 paragraph (0061))**; and establishing at least one broadcasting Internet protocol address to be watched by the user before said step of receiving the Internet Protocol packet by the buffer is performed **(page 16 paragraph (0159) lines 1-5)**. Lastly, and said step of filtering a user datagram protocol comprises the steps of: receiving an Internet protocol packet from which an Internet protocol header is removed **(page 19 paragraph (0193))**; separating a user datagram protocol header and data of the packet; comparing a port number recorded on the user datagram protocol header with a port number assigned previously by the user **(page 12 paragraph (0212) lines 1-6)**; outputting the data to the Moving Picture Experts Group-N transport stream processing unit, when the port number recorded on the user datagram protocol header is identical with the port number assigned previously **(IP pactekts to Routing Circuit in figure 4b)**, as it is determined that the data is received normally; and performing a discard processing, when the port

number recorded on the user datagram protocol header is not identical with the port number assigned previously, as it is determined that the data is received abnormally, said discard processing discarding data **(IP video circuit filters out just IP packets addressed to network adapter (248) in figure 6E)**.

Therefore, it would have been obvious at the time of the invention to include the use of internet protocol packet able to address an undetermined amount of paths. This is useful because the IP signal can be use to transfer information into video, data and voice. This is a trivial part in controlling conference calls because it involves the three, video, data, and voice.

Regarding claims 4 and 21, Rakib discloses the apparatus according to claim 2, wherein said set-top box further includes a user datagram protocol filtering process unit for performing a port number filtering in order to identify whether data is normally received without any data loss **(IP video Circuit filters out just IP packets addressed to network adapter (248) in figure 6E)**.

Regarding claim 9, Rakib discloses the method according to claim 8, further comprising the step of establishing at least one broadcasting Internet protocol address to be watched **(Routing process looks up destination IP address (112) in figure 6A)** by the user before said step of receiving the Internet Protocol packet by the buffer is performed **(page 16 paragraph (0159) lines 1-5)**.

Regarding claim 10, Gardes discloses the method according to claim 8, wherein said step of outputting the Internet protocol packet to said computer further comprises

the step of outputting the Internet protocol packet **(IP in figure 2)** to the computer through a transmission buffer, when the Internet protocol address of the extracted Internet protocol header is not identical with the broadcasting Internet protocol address **(page 18 paragraph (0190) Rakib)**.

Regarding claim 11, Gardes discloses the method according to claim 8, wherein said step of outputting said Internet protocol packet to a Moving Picture Experts Group-N transport stream processing unit further comprises the step of filtering a user datagram protocol **(MPEG2 streamed data (page 1 paragraph (0005) lines 3-4)**.

Regarding claim 12, Rakib discloses the method according to claim 1, wherein said step of filtering a user datagram protocol **(IP video Circuit filters out just IP packets addressed to network adapter (248) in figure 6E)** comprises the steps of: receiving an Internet protocol packet from which an Internet protocol header is removed **(Strips off IP header (248) in figure 6E)**; separating a user datagram protocol header and data of the packet; comparing a port number recorded on the user datagram protocol header with a port number assigned previously by the user **(page 18 paragraph (0190))**; outputting the data to the Moving Picture Experts Group-N transport stream processing unit, when the port number recorded on the user datagram protocol header is identical with the port number assigned previously **(MPEG2 streamed data (page 1 paragraph (0005) lines 3-4 Gardes)**, as it is determined that the data is received normally; and performing a discard processing, when the port number recorded on the user datagram protocol header is not identical with the port number

assigned previously, as it is determined that the data is received abnormally, said discard processing discarding data **(page 1 paragraph (0021) Gardes)**.

Regarding claim 15, Rakib discloses the method according to claim 12, further comprising of performing a user datagram protocol filtering procedure **(IP video Circuit filters out just IP packets addressed to network adapter (248) in figure 6E)** before performing said step of outputting the Internet protocol packet to said Moving Picture Experts Group-N transport stream processing unit **(MPEG2 streamed data (page 1 paragraph (0005) lines 3-4 Gardes)**.

Regarding claim 17, Gardes discloses the apparatus of claim 16, with said broadcasting internet protocol address assigned previously by a user **(column 26 lines 26-30 Phillip)**.

Regarding claim 18, Gardes discloses the apparatus according to claim 16, wherein said second unit comprises: a fifth unit receiving and storing the Internet protocol packet **(IP in figure 2)**; an sixth unit extracting an Internet protocol header from the Internet protocol packet outputted from said fifth unit; a seventh unit comparing the Internet protocol header directly from the extraction from said sixth unit with the Internet protocol address assigned previously **(page 2 paragraph (0054))**; an eighth unit storing the broadcasting Internet protocol address value set by the user **(page 8 paragraph (0075) Rakib)**; a ninth unit selecting an Internet protocol packet path according to a result value of the comparison outputted from said seventh unit **(page 18 paragraph (0190) Rakib)**; and a tenth unit transmitting the Internet protocol packet in order to

return the Internet protocol packet from said Internet protocol packet path processing unit to said fourth unit, when the result value of the comparison is determined to be the Internet protocol address corresponding to general Internet data **(Routing process circuitry looks up Ethernet address (196) in figure 6D Rakib)**.

Regarding claim 19, Gardes discloses the apparatus according to claim 18, wherein said second unit comprises said Moving Picture Experts Group-N transport stream processing unit for processing the Internet protocol packet outputted from the Internet protocol packet path processing unit **(MPEG2 streamed data (page 1 paragraph (0005) lines 3-4)**, when the result value of the comparison of the comparator is determined to be an Internet protocol address corresponding to a digital broadcasting signal **(page 18 paragraph (0190) Rakib)**.

3. Claims 3,5, 20 and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gardes et al (US 2005/0055728 A1) in view of Phillips et al (US 7,239,698 B2) in view of Rakib et al (US 2004/0172658 A1) in view of (US 5,943,030). Hereinafter referred as Gardes, Phillips, Rakib, and Minamibayashi.

Regarding claims 3 and 20, Gardes discloses the apparatus according to claim 2, wherein said comparator of said set-top box **(STB In figure 2). However, it fails to show** the STB makes a use of an exclusive OR gate. Minamibayashi discloses in **(column 13 lines 5-13)** a stb which makes use of an exclusive or gate.

Therefore, it would have been obvious at the time of the invention to include the use of a STB using an exclusive OR gate. This is a useful combination because electronics involve using AND, OR, and many other forms of gates to perform desired operations.

Regarding claims 5, and 22-24, Rakib discloses the apparatus according to claim 4, wherein said user datagram protocol filtering process unit comprises a user datagram protocol processing unit for separating a user datagram protocol header and data part **(IP packets to routing circuit in figure 4b)**; an exclusive OR unit for comparing the user datagram protocol header with the filtered user datagram protocol header **(IP video circuit filters out just IP packets (248) in figure 6E)**; and a final processing unit for determining whether to discard the data or to output the data to a Moving Picture Experts Group-N transport stream processing unit **(MPEG2 streamed data (page 1 paragraph (0005) lines 3-4 Gardes)** according to an output value of said exclusive OR unit **(column 13 lines 5-13 Minamibayashi)**.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRANKLIN S. ANDRAMUNO whose telephone number is (571)270-3004. The examiner can normally be reached on Mon-Thurs (7:30am - 5:00pm) alternate Fri off (EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571)272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chris Kelley/
Supervisory Patent Examiner, Art Unit 2623